



PATENT
Attorney Docket No. 215242

#4/A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE **RECEIVED**

OCT 31 2002

In re Application of:

Swander

Art Unit: Unassigned

Technology Center 2100

Application No. 10/056,889

Examiner: Unassigned

Filed: January 25, 2002

For: METHOD AND APPARATUS FOR
FRAGMENTING AND REASSEMBLING
INTERNET KEY EXCHANGE DATA
PACKETS

PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Prior to the examination of the above-identified patent application, please enter the following amendments and consider the following remarks.

IN THE CLAIMS:

Please add new claims 13-23.

13. A method for transmitting data packets across a network comprising the steps of:

generating and transmitting an Internet Key Exchange (IKE) packet over a network;
determining whether a response to the IKE packet was received;
fragmenting the IKE packet into a plurality of smaller packets when a response is not received; and
transmitting each of the plurality of smaller packets over a network.

14. The method of claim 13 wherein each of the plurality of small packets contains a header formatted according to the IKE protocol

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15. The method of claim 13 wherein the IKE packet contains a header formatted according to the IKE protocol.

16. The method of claim 15 wherein the plurality of smaller packets contain the same information as that contained within the original IKE packet.

17. The method of claim 16 wherein at least one of the plurality of smaller packets contains the header formatted according to the IKE protocol.

18. A method for transmitting data packets across a network comprising the steps of:

generating a data packet containing Internet Key Exchange (IKE) information;
determining whether fragmentation of the data packet is necessary to successfully transmit the IKE information over a network; and
fragmenting the data packet if necessary into a plurality of smaller packets that may be transmitted over a network.

19. The method of claim 18 wherein the step of determining whether fragmentation is necessary is not based exclusively on the size of the data packet.

20. A method for resolving transmitting errors associated with transmitting Internet Key Exchange (IKE) packets via protocol stacks that implement the Transmission Control Protocol (TCP), the User Datagram Protocol (UDP), and/or the Internet Protocol (IP) comprising the steps of:

generating a data packet containing IKE data;
fragmenting the packet with a code module that does not implement the TCP, UDP or IP protocols before the packet is processed by a code module that does implement the TCP, UDP or IP protocols; and
transmitting the fragmented packet over a network.